FIG. 1

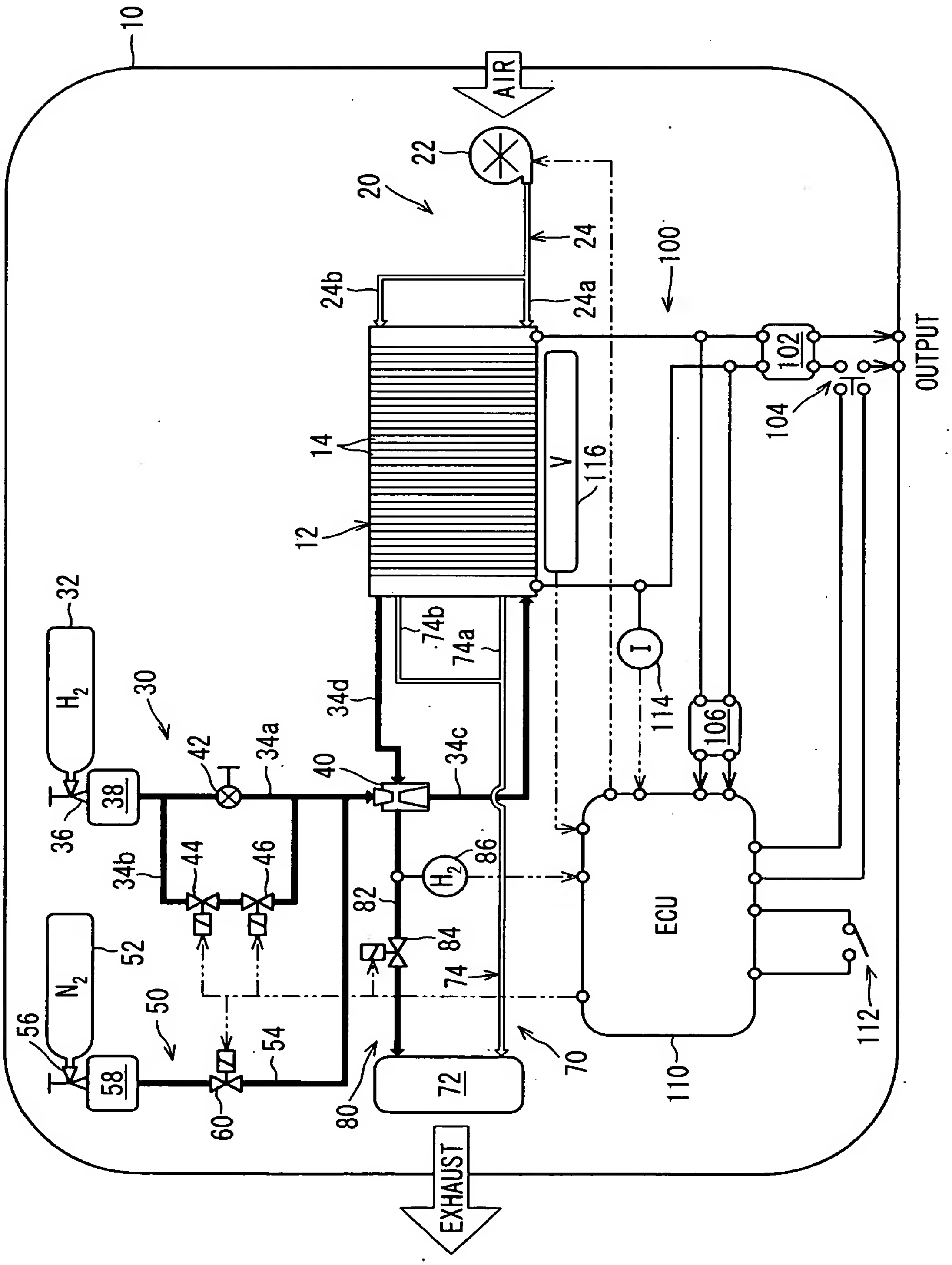

10
AIR
22
20
24
24b
24a
100
102
OUTPUT
104
14
12
116
V
32
H_2
30
36
38
42
34a
34b
44
46
40
34d
34c
74b
74a
I
114
106
N_2
52
50
56
58
60
54
82
H_2
86
84
74
80
72
70
ECU
110
112
EXHAUST

FIG. 2

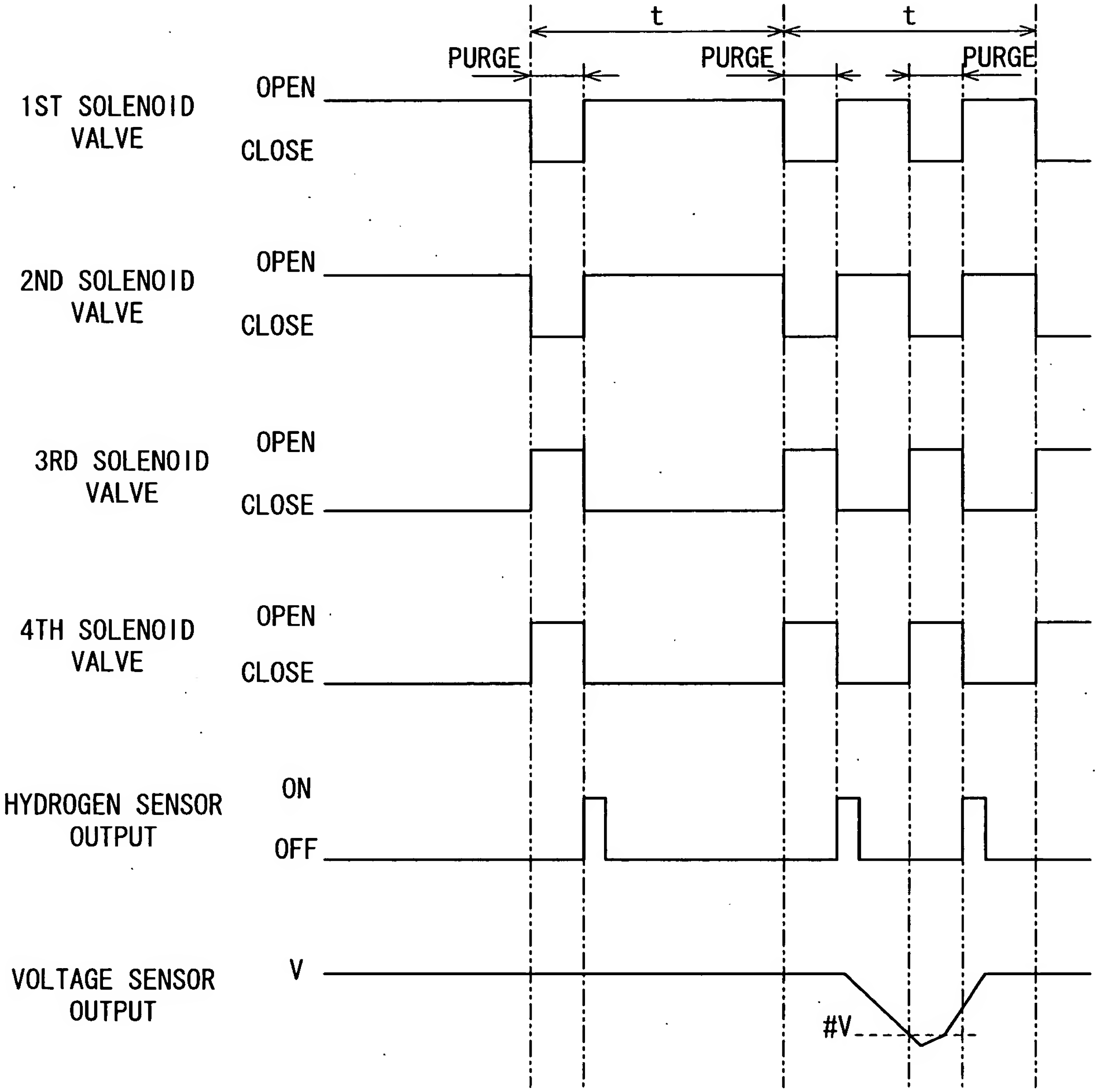

t
t
PURGE
PURGE
PURGE
1ST SOLENOID VALVE
OPEN
CLOSE
2ND SOLENOID VALVE
OPEN
CLOSE
3RD SOLENOID VALVE
OPEN
CLOSE
4TH SOLENOID VALVE
OPEN
CLOSE
HYDROGEN SENSOR OUTPUT
ON
OFF
VOLTAGE SENSOR OUTPUT
V
#V

FIG. 3

OUTPUT CURRENT I (A/cm^2)	PURGE INTERVAL t (min)	THRESHOLD VALUE #V (V)
0～0. 1	20	0. 6
0. 1～0. 15	10	0. 6
0. 15～0. 2	5	0. 55
0. 2～0. 25	3	0. 5
0. 25～0. 3	1	0. 45

FIG. 4

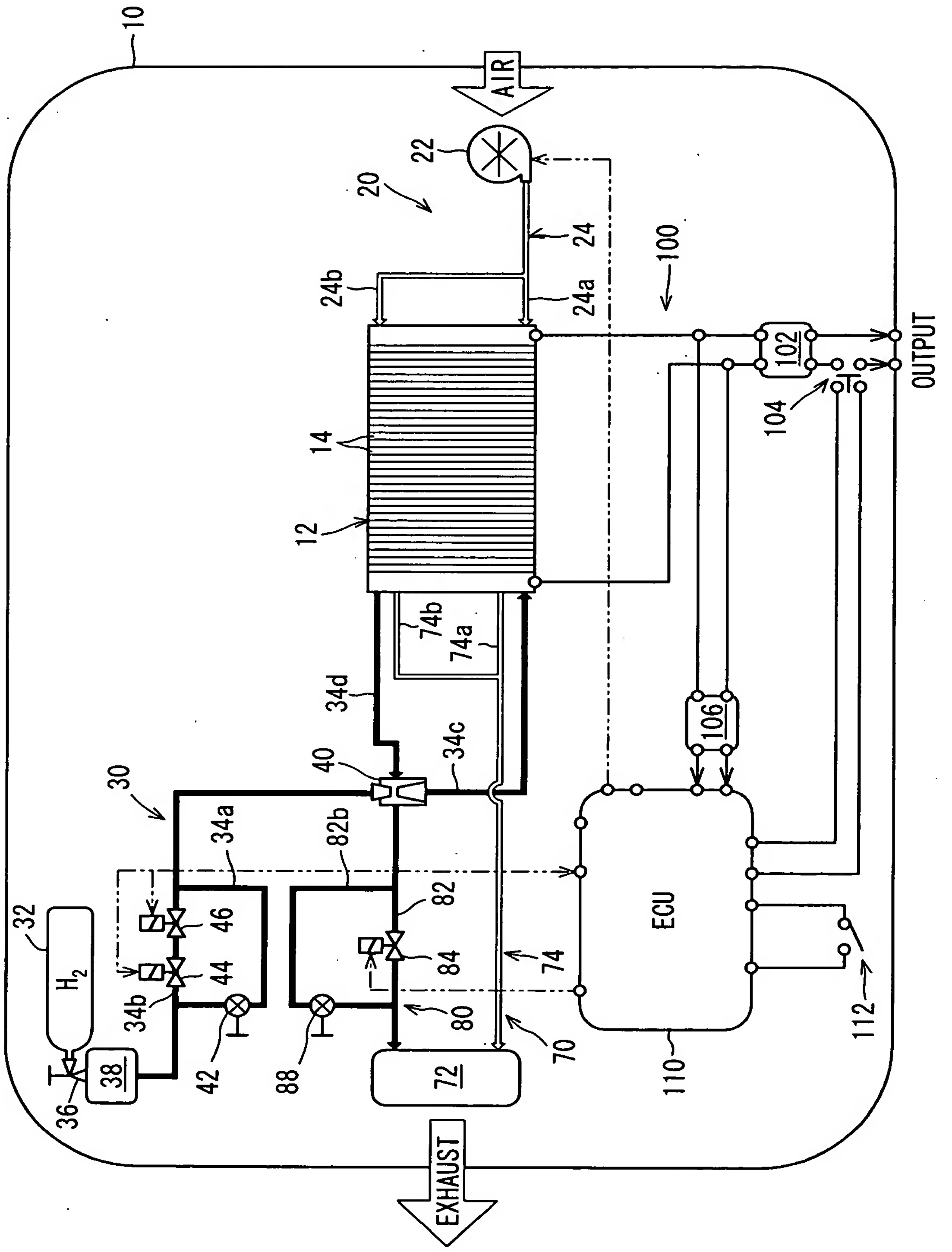

10
AIR
22
20
24
24b
24a
100
102
OUTPUT
104
14
12
74b
74a
34d
34c
40
30
34a
82b
106
32
H_2
46
44
82
84
74
ECU
34b
42
88
80
70
38
36
72
110
112
EXHAUST

FIG. 5

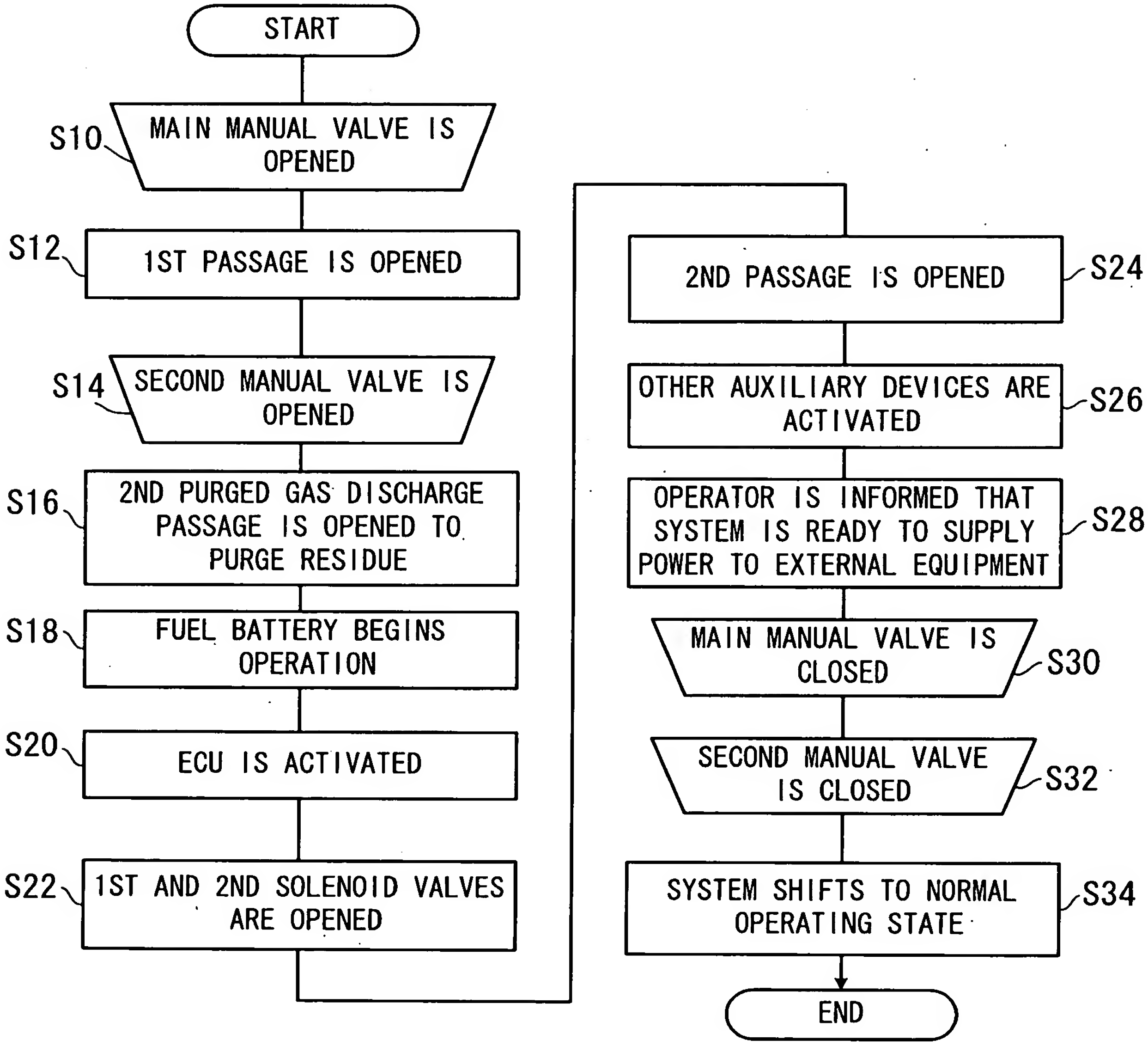

START
S10
MAIN MANUAL VALVE IS OPENED
S12
1ST PASSAGE IS OPENED
S14
SECOND MANUAL VALVE IS OPENED
S16
2ND PURGED GAS DISCHARGE PASSAGE IS OPENED TO PURGE RESIDUE
S18
FUEL BATTERY BEGINS OPERATION
S20
ECU IS ACTIVATED
S22
1ST AND 2ND SOLENOID VALVES ARE OPENED
S24
2ND PASSAGE IS OPENED
S26
OTHER AUXILIARY DEVICES ARE ACTIVATED
S28
OPERATOR IS INFORMED THAT SYSTEM IS READY TO SUPPLY POWER TO EXTERNAL EQUIPMENT
S30
MAIN MANUAL VALVE IS CLOSED
S32
SECOND MANUAL VALVE IS CLOSED
S34
SYSTEM SHIFTS TO NORMAL OPERATING STATE
END

FIG. 6

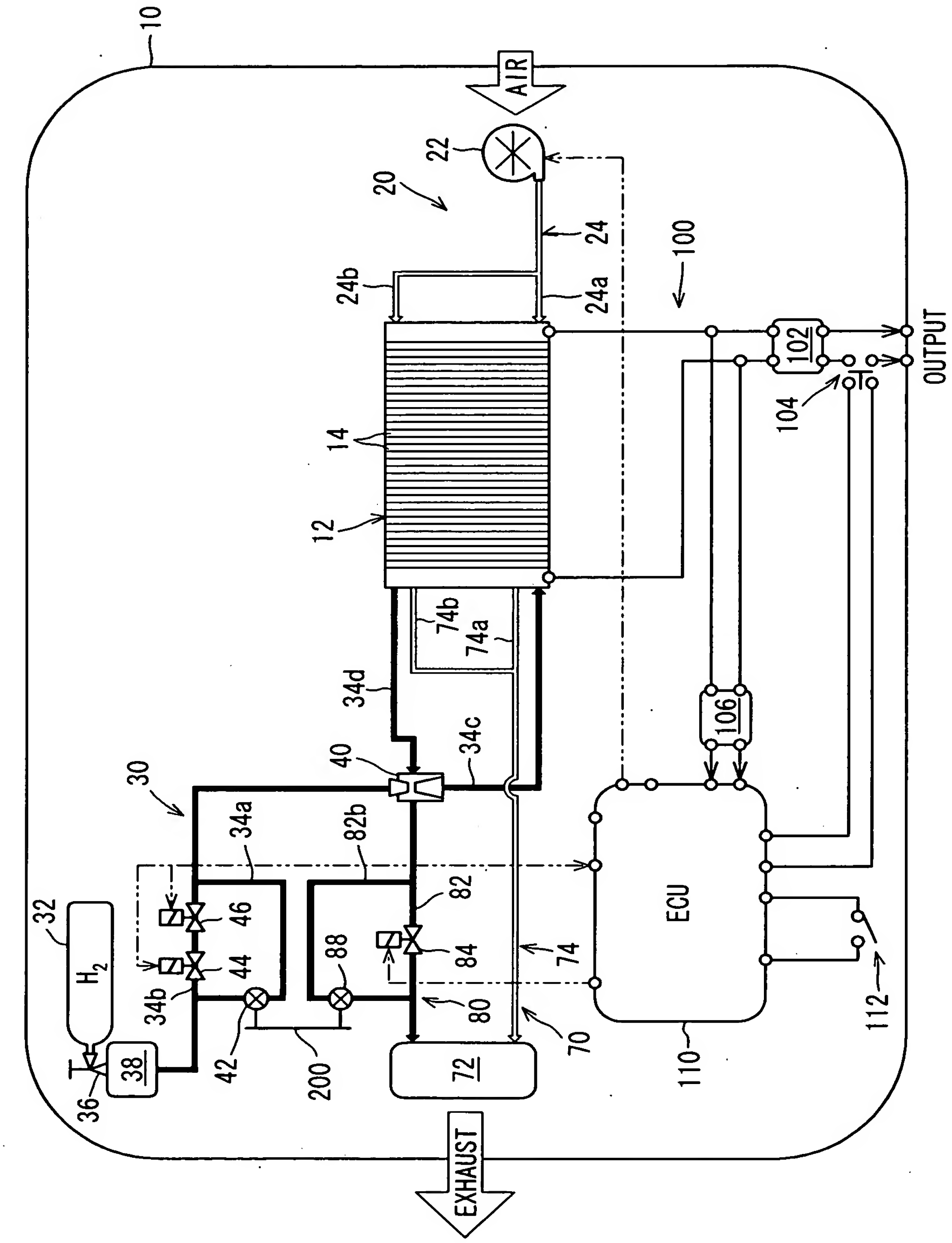

10
AIR
22
20
24
24b
24a
100
102
OUTPUT
104
14
12
74b
74a
34d
34c
106
40
30
34a
82b
32
H2
46
82
ECU
44
88
84
74
34b
42
80
70
112
38
36
200
72
110
EXHAUST

FIG. 7

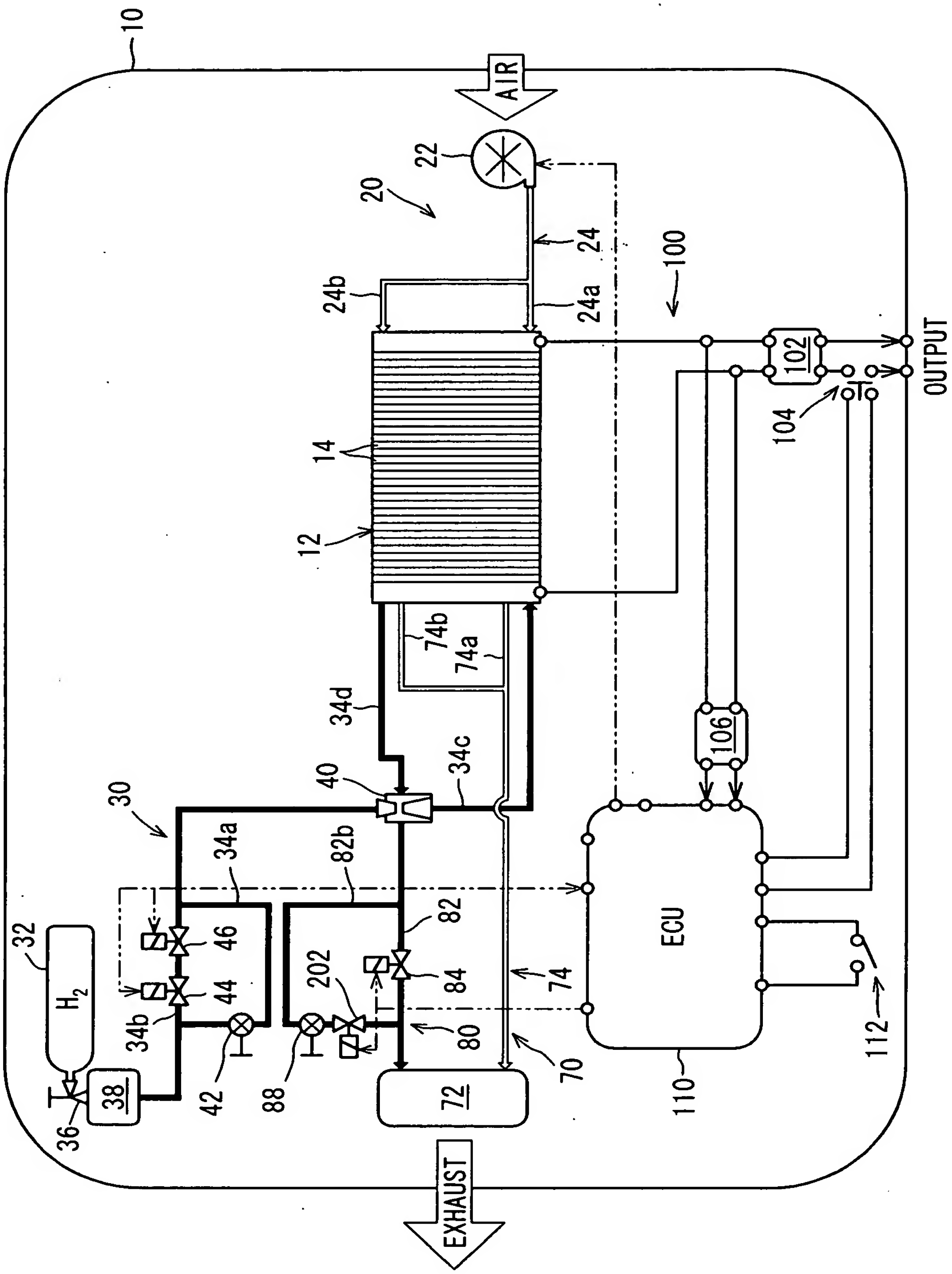

10
AIR
22
20
24
24b
24a
100
102
OUTPUT
104
14
12
74b
74a
34d
34c
40
106
30
34a
82b
82
ECU
32
H_2
46
44
84
202
74
34b
80
70
38
42
88
72
110
112
36
EXHAUST

FIG. 8

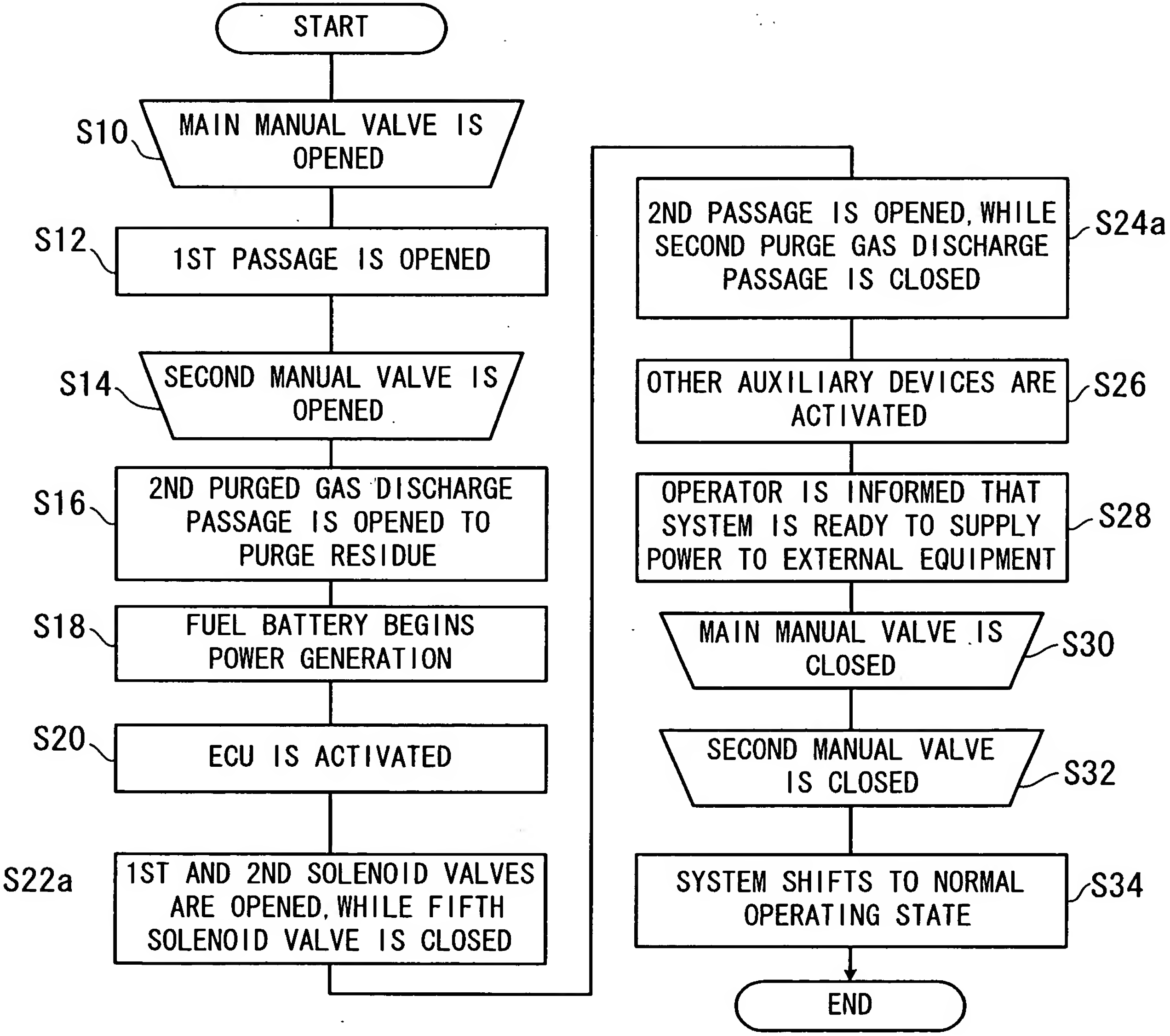
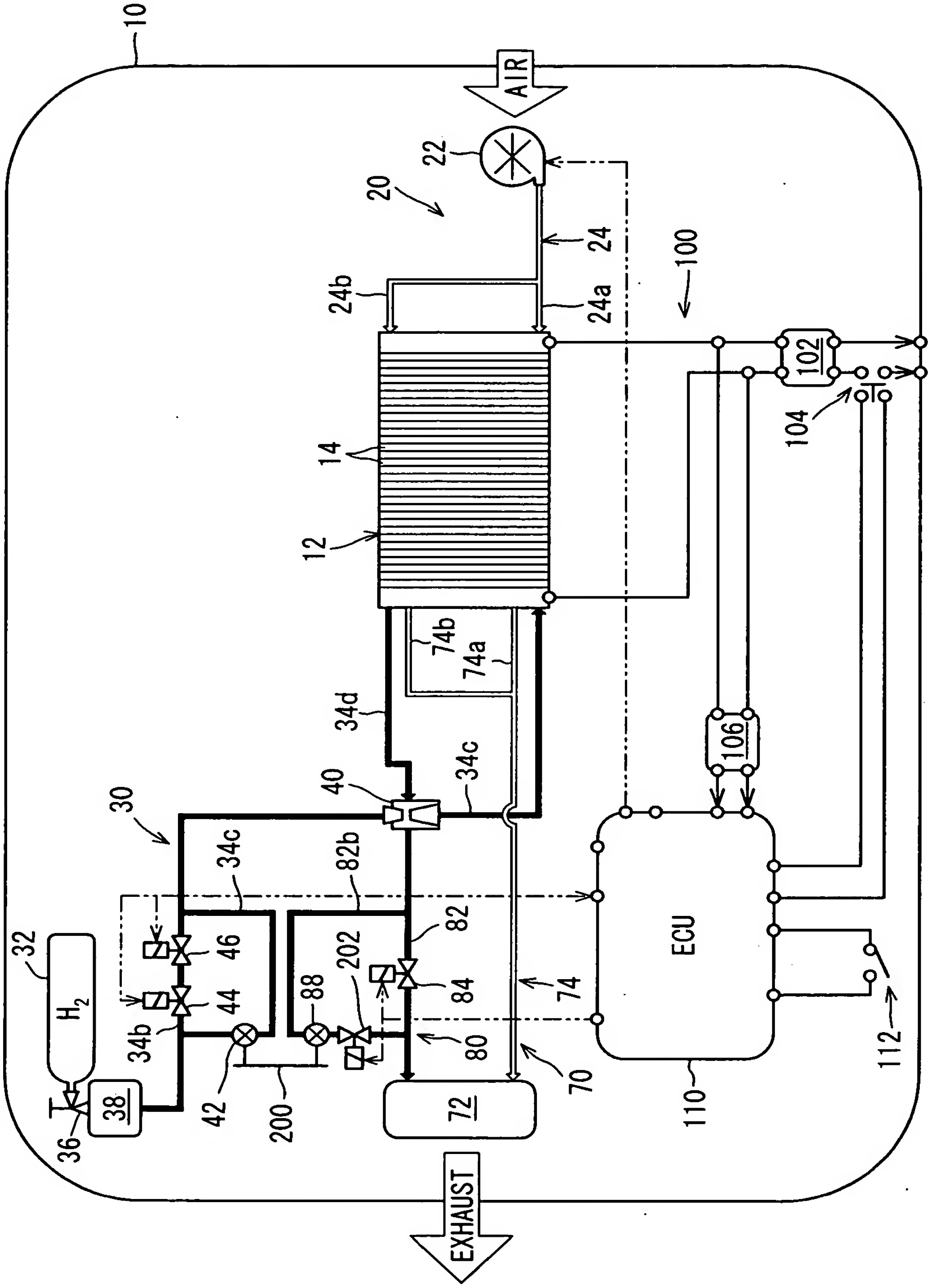

START
S10
MAIN MANUAL VALVE IS OPENED
S12
1ST PASSAGE IS OPENED
S14
SECOND MANUAL VALVE IS OPENED
S16
2ND PURGED GAS DISCHARGE PASSAGE IS OPENED TO PURGE RESIDUE
S18
FUEL BATTERY BEGINS POWER GENERATION
S20
ECU IS ACTIVATED
S22a
1ST AND 2ND SOLENOID VALVES ARE OPENED, WHILE FIFTH SOLENOID VALVE IS CLOSED
2ND PASSAGE IS OPENED, WHILE SECOND PURGE GAS DISCHARGE PASSAGE IS CLOSED
S24a
OTHER AUXILIARY DEVICES ARE ACTIVATED
S26
OPERATOR IS INFORMED THAT SYSTEM IS READY TO SUPPLY POWER TO EXTERNAL EQUIPMENT
S28
MAIN MANUAL VALVE IS CLOSED
S30
SECOND MANUAL VALVE IS CLOSED
S32
SYSTEM SHIFTS TO NORMAL OPERATING STATE
S34
END

FIG. 9


10
AIR
22
20
24
24b
24a
100
102
OUTPUT
104
14
12
74b
74a
34d
106
40
34c
30
34c
82b
82
32
H2
46
44
202
88
84
74
ECU
34b
38
36
42
200
72
80
70
110
112
EXHAUST